

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

l c  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,738	02/21/2002	Kenneth J. Smith	D5151	7619
30410	7590	12/03/2003	EXAMINER	
INTERNATIONAL TRUCK INTELLECTUAL PROPERTY COMPANY, 4201 WINFIELD ROAD P.O. BOX 1488 WARRENVILLE, IL 60555			FORD, JOHN K	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 12/03/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

Applicant(s)

10/079,738

Smith et al.

Examiner

FORD

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication..
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 10/22/03
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) 9 is/are objected to.
- 8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15) Notice of References Cited (PTO-892)
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2+45
- 18) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) Notice of Informal Patent Application (PTO-152)
- 20) Other: \_\_\_\_\_

Applicant's response of October 22, 2003 electing Group I, claims 1-9, without traverse, is acknowledged. Applicant's cooperation in determining whether the PACCAR prior art exists in over the road trucks is appreciated, however the Examiner has located Canada 2,199,687 and is the prior art the Examiner was seeking. To date counsel has not filed any supplemental response related to this prior art inquiry by the Examiner.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Johnson (USP 4,989,412) and Caley et al. (CA 2,199,687)

Johnson teaches mounting the heater 18 and blower 21 on the passenger compartment side of firewall 20 and placing the evaporator 16 on the engine compartment side of firewall 20. A flexible conduit 16 connects the two separate casings. The advantages of such a configuration allow for testing of the refrigeration system prior to assembly on the vehicle.

Caley in Figure 8 teaches a single casing with an evaporator 36, fan 71, heater 52 with a bypass opened and closed by blend-door 56.

To have split the casing of Caley and mounted the evaporator 36 on the engine side of the fire wall and the fan 71 and heater 52 and blend-door 56 on the passenger compartment side of the firewall would have been obvious from the teaching of Johnson to enjoy the assembly advantages discussed by Johnson. Note that Caley discloses fresh air and recirculation air ports (57 and 81) in Figure 8.

Claim 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 and 6 above, and further in view of DE 3738425 or DE 19651669.

DE'425 reinforces the afore-discussed references (Johnson / Caley), by explicitly teaching placing the evaporator 4 on the engine side of a front wall 23 and placing the heater 5 and blower 3 on the opposite (passenger) side of the front wall 23. DE '669 cited by applicant is similar and is not discussed further here except to incorporate by reference the referenced sections on the PCT search report for PCT / US 02/05468.

Claims 2 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of Masauji et al. (USP 5,939,853) and Han (EP 0983884)

Masanji teaches stepper motors 16,17 and 18 for actuating the vent/recirculation door 4, air mix damper 11 and vent/defrost/foot doors, respectively. The details of the linkage between motor 18 and doors 15a and 15b is not disclosed however is well known. Typical of such linkages are gear trains such as disclosed by Han in a motor driven actuator system. To have used Hans linkage and Masauji stepper motors to move the various doors of Caley et al to ensure occupant comfort would have been obvious to one of ordinary skill in the art.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 2 - 5 above, and further in view of Sumikawa et al. (USP 4,383,642) or Nilsson et at. (USP 4,519,302).

Sumikawa and Nilsson each teach double doors for shutting off both the upstream and downstream portions of the heater core. To have used such doors in Johnson/Caley to improve bypass performance would have been obvious.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 6 above, and further in view of Burst et al. (USP 4,956,979) or De Rees (USP 3,170,509).

Burst discloses two drains as claimed, as does De Rees. To have added such drains to Caley / Johnson to improve drainage would have been obvious.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of Sjoqvist (USP 4,353,430).

In Figure 1, Sjoqvist shows the two through-holes in the firewall and in col. 5, lines 31-43 discloses that the through-hole not used for the pedal assembly is used for the heating and air conditioning system as an air port. To have arranged the split casing of Johnson/Caley on opposite sides of the firewall using one of the preformed through-holes would have been obvious to one of ordinary skill to advantageously avoid having to further modify the firewall.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to John Ford at telephone number 703-308-2636.

  
John K. Ford  
Primary Examiner